

Cosmic Origins Program Analysis Group

Shouleh Nikzad

COPAG Executive Committee Chairperson

9 January 2023

agenda

- Introduction Shouleh Nikzad 5 mins
- Stars SIG Rachael Beaton 10 mins
- Galaxies SIG Benne Holwerda 10 mins
- UV STIG Stephan McCandliss 10 mins
- IR STIG Meredith MacGregor and Jake Connors 10 mins
- AGN SIG Shobita Satyapal 10 mins
- Discussion Stephan McCandliss – ideas for a Habitable
Worlds Observatory Science Interest Group

What is Cosmic Origins Program Analysis Group (COPAG)?

The COPAG serves as a community-based, interdisciplinary forum for soliciting and coordinating community analysis and input in support of Cosmic Origin objectives and of their implications for architecture planning and activity prioritization and for future exploration. It provides findings of analyses to the NASA Astrophysics Division Director.

- Science
 - future great observatories (c.f. Astro 2020 decadal survey)
 - Science gaps & precursor science
- Technology
 - Astrophysics technology gaps
 - Biennial Technology Report
- People
 - State of the profession
 - Diversity, Equity and Inclusion

Executive Committee

<u>Member</u>	<u>Term</u>	<u>Institution</u>
Shouleh Nikzad (Chair)	April 2022–October 2024	Jet Propulsion Laboratory
Stephan McCandliss	November 2018–October 2024	Johns Hopkins University
Christine Chen	November 2020–January 2024	Space Telescope Science Institute
Chris Hayward	November 2020–January 2024	Flatiron Institute
Sabrina Stierwalt	November 2020–January 2024	Occidental College
Hsiao-Wen Chen	April 2022–October 2024	Univeristy of Chicago
Enrique Lopez Rodriguez	April 2022–October 2024	Stanford University
Rachael Beaton	January 2023–October 2025	Space Telescope Science Institute
Sanchayeeta Borthakur	January 2023–October 2025	Arizona State University

Manuel Bautista (Executive Secretary, Ex-Officio)	NASA HQ
Peter Kurczynski (COR Program Office, Ex-Officio)	NASA/GSFC

Welcome New Members!

Committee

April 2022-

November 20

November 2

November 2020–January 2024

November 2020–January 2024

April 2022–October 2024

April 2022–October 2024

January 2023–October 2025

January,



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Chris Haywood

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Rachael Beaton

Sanchayeeta Borthakur

Manuel Bautista (Executive Secretary, Ex-Officio)

NASA HQ

Peter Kurczynski (COR Program Office, Ex-Officio)

NASA/GSFC

How can I get involved?

- Visit the Cosmic Origins website

<https://cor.gsfc.nasa.gov>

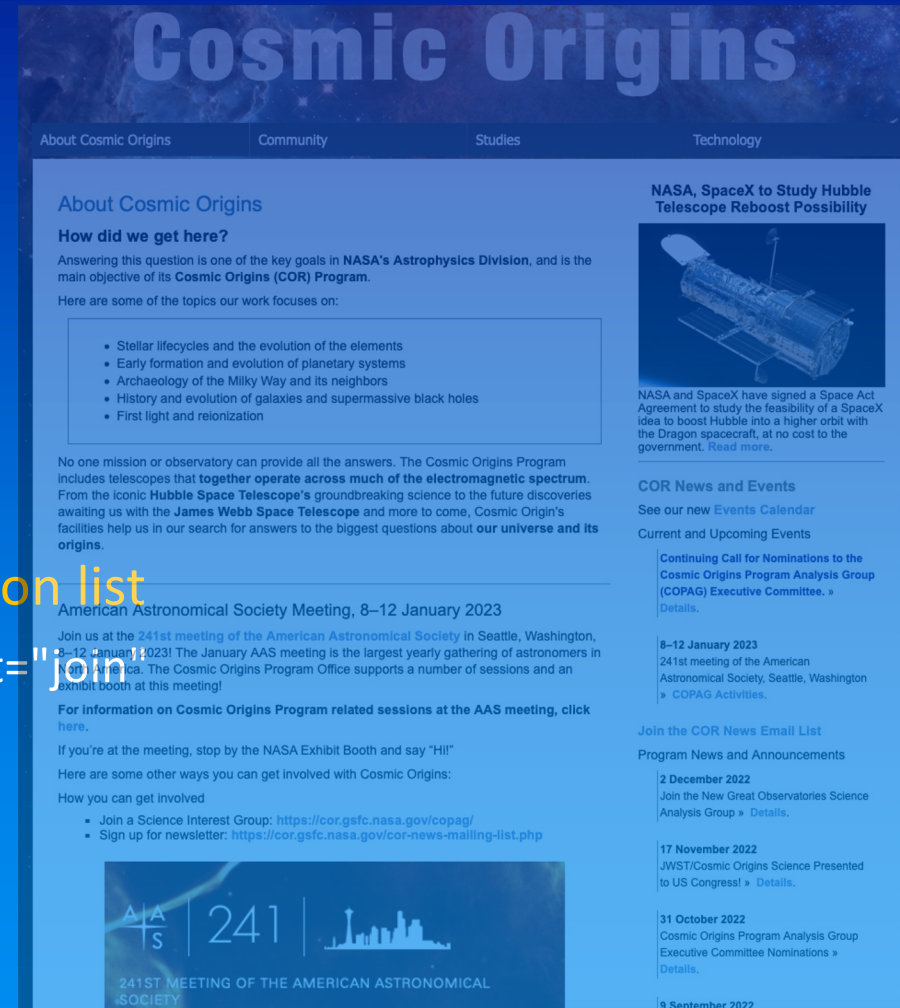
<https://cor.gsfc.nasa.gov/copag/>

- Join the Cosmic Origins email distribution list

COR-News-join@lists.nasa.gov with Subject="Join"

- Join a Science Interest Group

<https://cor.gsfc.nasa.gov/sigs/sigs.php>



The screenshot shows the Cosmic Origins website with a dark blue header and navigation tabs: About Cosmic Origins, Community, Studies, and Technology. The main content area is divided into two columns. The left column, titled 'About Cosmic Origins', includes a section 'How did we get here?' explaining the program's goals and a list of topics: Stellar lifecycles, Early formation of planetary systems, Archaeology of the Milky Way, History and evolution of galaxies and supermassive black holes, and First light and reionization. Below this is a paragraph about the program's scope and a link to the American Astronomical Society Meeting. The right column features a news item titled 'NASA, SpaceX to Study Hubble Telescope Reboost Possibility' with an image of the Hubble telescope and a brief description. Below the news item is a section for 'COR News and Events' with links to a calendar, current events, and a call for nominations to the COPAG Executive Committee. At the bottom, there is a banner for the '241ST MEETING OF THE AMERICAN ASTRONOMICAL SOCIETY' with a date of 9 September 2022.

<https://cor.gsfc.nasa.gov>

How can I get involved?

Habitable Worlds Observatory

- Science Interest Group?
- Discussion later in this session
- Stay connected by joining an email distribution list
<https://forms.gle/XEdp2H5vhRmseSJbA>

Extra slides



ASTROPHYSICS FLEET

PRE-FORMULATION

MIDEX/MO 2028
PROBE ~2030
ATHENA EARLY 2030s
LISA MID 2030s

VERY SMALL MISSIONS

TRADITIONAL MISSIONS

KEY

- INTERNATIONAL PARTNER LED
- ISS INSTRUMENT
- SMALLSAT
- CUBESAT
- BALLOON
- FORMULATION
- IMPLEMENTATION
- OPERATING
- EXTENDED

